AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1.   (currently amended) ~~Method~~ A method for detecting and locating the difference in density and/or structure and/or chemical composition of a biological tissue (7) which is subjected to continuous illumination in a first determined band of frequencies, able to cause the tissue to generate a phenomenon of fluorescence, auto-fluorescence or luminescence in a second band of frequencies, ~~characterized in that it comprises the steps consisting of:~~ comprising:

-    capturing an image of the biological tissue illuminated in this way, using colour video means provided with image sensors with a mosaic of pixels provided with filters of complementary colours, the filters having a greater range of reaction compared to filters of primary colours,

-    for each point of the image so obtained:

a)   collecting data related to the energy received by each pixel, so as to reconstitute the image of the biological tissue (7), and

b)   amplifying the signal corresponding to the energy received in the second band of frequencies so as to characterize or cause to appear the said difference of the biological tissue

(7) in the image obtained, by acting on signals as received by at least two pixels provided with filters of different colours.

2. (currently amended) ~~Method~~ The method as claimed in claim 1, ~~characterized in that~~ wherein the data collected in the second band of frequencies is processed so as to characterize the structure difference obtained in a colour other than the colour naturally corresponding to this second zone of frequencies.

3. (currently amended) ~~Method~~ The method as claimed in claim 1, ~~characterized in that~~ wherein radiations are added to [[the]] a band of frequencies of the illumination spectrum that are able to modify the fluorescence spectrum to shift [[the]] a fluorescence band of parasite fluorescence.

4. (currently amended) ~~Device~~ A device for detecting and locating the difference in density and/or structure and/or chemical composition of a biological tissue (7), ~~characterized in that it comprises:~~ comprising:

- means (1) able to illuminate the biological tissue (7) continuously with a light located in a first determined band of frequencies, so as to cause the tissue to generate a phenomenon of fluorescence in a second band of frequencies,

- colour video means (11) provided with image sensors with a mosaic of pixels provided with filters of complementary colours, <u>the filters having a greater range of reaction compared to filters of primary colours,</u>

- capture and calculation means which, for each point of the image so obtained, are able to collect data related to the energy received by each pixel so as to reconstitute the image of the biological tissue (7), <u>and</u>

- means for amplifying the signal corresponding to the energy received in the second band of frequencies so as to characterize or cause to appear the said difference of the biological tissue in the image obtained<u>, by acting on at least two signals as received by at least two pixels provided with filters of different colours</u>.

5. (currently amended) ~~Device~~ <u>The device</u> as <u>claimed</u> in claim 4, ~~characterized in that it~~ <u>wherein the device further</u> comprises processing means (13) to process data collected in the second band of frequencies, so as to characterize the structure difference obtained in a colour other than the colour naturally corresponding to this second zone of frequencies.

6. (canceled)

7. (canceled)

8.   (currently amended) ~~Method~~ The method as claimed
in claim 2, ~~characterized in that~~ wherein radiations are added to
the band of frequencies of the illumination spectrum that are
able to modify the fluorescence spectrum to shift the
fluorescence band of parasite fluorescence.

9. (new) The method as claimed in claim 1, wherein said
complementary colours are cyan, magenta and yellow.

10. (new) The method as claimed in claim 1, wherein
said mosaic of pixels is further provided with a green filter.

11. (new) The method as claimed in claim 1, wherein
said first band of frequencies includes a visible part, for each
point of the image, said data related to the energy received by
each pixel collected so as to reconstitute the image of the
biological tissue, are derived from illumination in visible light
and from fluorescence produced by said tissue.

12. (new) The method as claimed in claim 1, wherein
while translating data for display of each point of the image on
a RGB video monitor, said amplifying is realized by providing
each red, blue, or green components of at least one point of the
image, in addition with data collected so as to reconstitute the
image of the biological tissue with a sum of amplified energy as

received by at least two neighboring pixels provided with filters of different colours.

13. (new) The method as claimed in claim 10, wherein said tissue is a tooth, the fluorescence of deteriorated parts being in the red, said amplification is realized when two neighboring pixels provided with filters of yellow and green are such that the yellow pixel receives energy by providing each red, blue or green components of at least one point of the image, in addition with data collected so as to reconstitute the image of the biological tissue with a sum of amplified energy as received by two neighboring pixels provided with filters of yellow and magenta.

14. (new) The method as claimed in claim 12, wherein said tissue is a tooth, the fluorescence of deteriorated parts being in the red, said amplification is realized when two neighboring pixels provided with filters of yellow and green are such that the yellow pixel receives energy by providing each red, blue or green components of the at least one point of the image, in addition with data collected so as to reconstitute the image of the biological tissue with a sum of amplified energy as received by two neighboring pixels provided with filters of yellow and magenta.